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         (c) 2004 BIOSIS
  File 73:EMBASE 1974-2004/May W1
         (c) 2004 Elsevier Science B.V.
  File 155:MEDLINE(R) 1966-2004/May W1
         (c) format only 2004 The Dialog Corp.
*File 155: Medline has been reloaded. Accession numbers
have changed. Please see HELP NEWS 154 for details.
  File 399:CA SEARCH(R) 1967-2004/UD=14020
         (c) 2004 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
Alert feature enhanced for multiple files, etc. See HELP ALERT.
      Set Items Description
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E1
E2
          2 AU=FOX GAREY A
E3
         0 *AU=FOX GARY ?
E4
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E5
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E6
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E7
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E12
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      S1
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E6
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E11

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E12
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          1970607
                  L
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            19041
                  В7
            76873
                  H2
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                  В7
            13792
                  H7
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                  L2
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DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0014560976
            BIOSIS NO.: 200300516339
Interaction of B7RP-1 with ICOS negatively regulates antigen
  presentation by B cells.
AUTHOR: Wahl Patricia; Schoop Roland; Horan Thomas P; Yoshinaga Steven
  K; Wuthrich Rudolf P (Reprint
AUTHOR ADDRESS: Division of Nephrology, Kantonsspital, Rorschacherstrasse
  95, 9007, Saint Gallen, Switzerland**Switzerland
AUTHOR E-MAIL ADDRESS: rpw@kssg.ch
JOURNAL: Inflammation 27 (4): p191-200 August 2003 2003
MEDIUM: print
ISSN: 0360-3997 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/2
           (Item 2 from file: 5)
              5:Biosis Previews(R)
DIALOG(R) File
(c) 2004 BIOSIS. All rts. reserv.
0014548784
            BIOSIS NO.: 200300503812
The B7 family member B7-H3 preferentially down-regulates T
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helper type 1-mediated immune responses. AUTHOR: Suh Woong-Kyung; Gajewska Beata U; Okada Hitoshi; Gronski Matthew A ; Bertram Edward M; Dawicki Wojciech; Duncan Gordon S; Bukczynski Jacob; Plyte Suzanne; Elia Andrew; Wakeham Andrew; Itie Annick; Chung Stephen; da Costa Joan; Arya Sudha; Horan Tom; Campbell Pauline; Gaida Kevin; Ohashi Pamela S; Watts Tania H; Yoshinaga Steven K; Bray Mark R; Jordana Manel; Mak Tak W (Reprint AUTHOR ADDRESS: Advanced Medical Discovery Institute, Ontario Cancer Institute, and Departments of Medical Biophysics and Immunology, University of Toronto, 620 University Avenue, Toronto, Ontario, M5G 2C1, Canada \* \* Canada AUTHOR E-MAIL ADDRESS: tmak@uhnres.utoronto.ca JOURNAL: Nature Immunology 4 (9): p899-906 September 2003 2003 MEDIUM: print ISSN: 1529-2908 (ISSN print) DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English 6/3/3 (Item 3 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0014115818 BIOSIS NO.: 200300074537 Potent activity of soluble B7RP-1-FC in therapy of murine tumors in syngeneic hosts. AUTHOR: Ara Gulshan; Baher Angelo; Storm Neal; Horan Tom; Baikalov Claudia; Brisan Emil; Camacho Reuben; Moore Alison; Goldman Hartt; Kohno Tadahiko; Cattley Russell C; Van Gwyneth; Gaida Kevin; Zhang Ming; Whoriskey John S ; Fong David; Yoshinaga Steven K (Reprint AUTHOR ADDRESS: Department of Inflammation, Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA, 91320, USA\*\*USA AUTHOR E-MAIL ADDRESS: skybay@adelphia.net JOURNAL: International Journal of Cancer 103 (4): p501-507 10 February, 2003 2003 MEDIUM: print ISSN: 0020-7136 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English 6/3/4 (Item 4 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013967480 BIOSIS NO.: 200200560991 Inducible costimulator costimulates cytotoxic activity and IFN-gamma production in activated murine NK cells AUTHOR: Ogasawara Kouetsu; Yoshinaga Steven K; Lanier Lewis L (Reprint AUTHOR ADDRESS: Department of Microbiology and Immunology, Cancer Research Institute, University of California, 513 Parnassus Avenue, HSE 420, Box 0414, San Francisco, CA, 94143-0414, USA\*\*USA JOURNAL: Journal of Immunology 169 (7): p3676-3685 October 1, 2002 2002 MEDIUM: print ISSN: 0022-1767 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

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DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0013775596
            BIOSIS NO.: 200200369107
The B7RP-1/ICOS T-cell co-stimulation pathway
AUTHOR: Yoshinaga Steven Kiyoshi (Reprint); Khare Sanjay (Reprint);
  Coccia Marco; Senaldi Giorgio (Reprint); Baikalov Claudia; Danilenko
  Dimitry; Horan Tom; Zhang Ming (Reprint); Gaida Kevin (Reprint);
  Whoriskey John (Reprint); Gresser Michael (Reprint); Ara Gulshan; Byrne
  Fergus (Reprint); Kohno Hiko; Edwards Carl K (Reprint
AUTHOR ADDRESS: Inflammation, Amgen Inc., One Amgen Center Drive, Thousand
  Oaks, CA, 91320, USA**USA
JOURNAL: FASEB Journal 16 (4): pA713 March 20, 2002 2002
MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists
on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002;
20020420
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/6
           (Item 6 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200200352765
0013759254
Renal tubular epithelial expression of the costimulatory molecule
  B7RP-1 (Inducible Costimulator Ligand)
AUTHOR: Wahl Patricia; Schoop Roland; Bilic Grozdana; Neuweiler Jorg; Le
  Hir Michel; Yoshinaga Steven K; Wuthrich Rudolf P (Reprint
AUTHOR ADDRESS: Division of Nephrology, Cantonal Hospital,
  Rorschacherstrasse 95, 9007, St. Gallen, Switzerland**Switzerland
JOURNAL: Journal of the American Society of Nephrology 13 (6): p1517-1526
June, 2002 2002
MEDIUM: print
ISSN: 1046-6673
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/7
           (Item 7 from file: 5)
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0013736658
             BIOSIS NO.: 200200330169
B7RP-1, a novel renal tubular epithelial antigen with costimulatory
AUTHOR: Wahl Patricia (Reprint); Bilic Grozdana (Reprint); Neuweiler Jorg;
  Yoshinaga Steven K; Wuthrich Rudolf P (Reprint
AUTHOR ADDRESS: Division of Nephrology, Saint Gallen, Switzerland**
JOURNAL: Journal of the American Society of Nephrology 12 (Program and
Abstract Issue): p643A-644A September, 2001 2001
MEDIUM: print
CONFERENCE/MEETING: ASN (American Society of Nephrology)/ISN (International
Society of Nephrology) World Congress of Nephrology San Francisco, CA, USA
  October 10-17, 2001; 20011010
ISSN: 1046-6673
DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster
RECORD TYPE: Citation
LANGUAGE: English
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6/3/8
           (Item 8 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0013582313
             BIOSIS NO.: 200200175824
Transgenic mice over-expressing the B7 related protein-1 (B7RP
  -1) develop an intestinal pathology similar to human Crohn's disease a
  new mouse model of inflammatory bowel disease
AUTHOR: Byrne Fergus R (Reprint); Whoriskey John S; Sarmiento Ulla; Senaldi
  Giorgio; Zhang Ming; Gaida Kevin; Danilenko Dimitry; Yoshinaga Steven
AUTHOR ADDRESS: Dept of Pathology, Amgen Inc, Thousand Oaks, CA, USA**USA
JOURNAL: Gastroenterology 120 (5 Supplement 1): pA.47 April, 2001 2001
MEDIUM: print
CONFERENCE/MEETING: 102nd Annual Meeting of the American
Gastroenterological Association and Digestive Disease Week Atlanta,
Georgia, USA May 20-23, 2001; 20010520
SPONSOR: American Gastroenterological Association
        American Association for the Study of Liver Diseases
        American Society for Gastrointestinal Endoscopy
        Society for Surgery of the Alimentary Tract
ISSN: 0016-5085
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
 6/3/9
           (Item 9 from file: 5)
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0012911329
            BIOSIS NO.: 200100083168
ICOS is essential for effective T-helper-cell responses
AUTHOR: Tafuri Anna; Shahinian Arda; Bladt Friedhelm; Yoshinaga Steve
  K; Jordana Manel; Wakeham Andrew; Boucher Louis-Martin; Bouchard Denis
  ; Chan Vera S F; Duncan Gordon; Odermatt Bernhard; Ho Alexandra; Itie
  Annick; Horan Tom; Whoriskey John S; Pawson Tony; Penninger Josef M;
  Ohashi Pamela S; Mak Tak W (Reprint
AUTHOR ADDRESS: Amgen Institute, 620 University Avenue, Toronto, ON, M5G
  2C1, Canada**Canada
JOURNAL: Nature (London) 409 (6816): p105-109 4 January, 2001 2001
MEDIUM: print
ISSN: 0028-0836
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
6/3/10
           (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200000491351
0012773038
Characterization of a new human B7-related protein: B7RP-1 is
  the ligand to the co-stimulatory protein ICOS
AUTHOR: Yoshinaga Steven K (Reprint); Zhang Ming; Pistillo Jeanne;
 Horan Tom; Khare Sanjay D; Miner Kent; Sonnenberg Michael; Boone Tom;
  Brankow David; Dai Tianang; Delaney John; Han Hong; Hui Ariela; Kohno
  Tadahiko; Manoukian Raffi; Whoriskey John S; Coccia Marco A
AUTHOR ADDRESS: Exploratory Research, Amgen Inc., Thousand Oaks, CA, 91320,
 USA**USA
JOURNAL: International Immunology 12 (10): p1439-1447 October, 2000 2000
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MEDIUM: print
ISSN: 0953-8178
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/11
            (Item 11 from file: 5)
DIALOG(R) File
                5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0012473461
             BIOSIS NO.: 200000191774
T-cell co-stimulation through B7RP-1 and ICOS
AUTHOR: Yoshinaga Steven K (Reprint); Whoriskey John S; Khare Sanjay
  D; Sarmiento Ulla; Guo Jane; Horan Tom; Shih Grace; Zhang Ming; Coccia
  Marco A; Kohno Tadahiko; Tafuri-Bladt Anna; Brankow David; Campbell
  Pauline; Chang David; Chiu Laura; Dai Tianang; Duncan Gordon; Elliott
  Gary S; Hui Ariela; McCabe Susan M; Scully Sheila; Shahinian Arda;
  Shaklee Christine L; Van Gwyneth; Mak Tak W; Senaldi Giorgio
AUTHOR ADDRESS: Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA,
  91320, USA**USA
JOURNAL: Nature (London) 402 (6763): p827-832 Dec. 16, 1999 1999
MEDIUM: print
ISSN: 0028-0836
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 6/3/12
            (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
           PMID: 12833154
  Costimulation through the inducible costimulator ligand is essential for
both T helper and B cell functions in T cell-dependent B cell responses.
  Mak Tak W; Shahinian Arda; Yoshinaga Steve K; Wakeham Andrew;
Boucher Louis-Martin; Pintilie Melania; Duncan Gordon; Gajewska Beata U;
Gronski Matthew; Eriksson Urs; Odermatt Bernhard; Ho Alexandra; Bouchard
Denis; Whorisky John S; Jordana Manel; Ohashi Pamela S; Pawson Tony; Bladt
Friedhelm; Tafuri Anna
  Advanced Medical Discovery Institute, and Ontario Cancer Institute,
Department of Medical Biophysics , University of Toronto, Toronto, Ontario
M5G 2C1, Canada. tmak@uhnres.utoronto.ca
 Nature immunology (United States)
                                        Aug 2003, 4
                                                        (8) p765-72,
          Journal Code: 100941354
1529-2908
 Document type: Journal Article
 Languages: ENGLISH
 Main Citation Owner: NLM
 Record type: Completed
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           13792 H7
              0 B7(W)H7
              11 BSL3
         2463403 PD
           19530 L2
             116 PD(W)L2
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23703 B7? 112 (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7? **S7** ? rd s7 ...examined 50 records (50) ...examined 50 records (100) ...completed examining records 66 RD S7 (unique items) ? s s8 and py<2002 Processing Processing 66 S8 51170825 PY<2002 S 9 15 S8 AND PY<2002 ? t s9/7/all 9/7/1 (Item 1 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013557974 BIOSIS NO.: 200200151485 The role of in vivo PD-1/PD-L1 interactions in syngeneic and allogeneic antitumor responses in murine tumor models AUTHOR: Zuberek Krystyna (Reprint); Runyon Kathlene (Reprint); Collins Mary (Reprint); Leonard John P (Reprint); Dunussi-Joannopoulos Kyri (Reprint) AUTHOR ADDRESS: Immunology, Genetics Institute/Wyeth-Ayerst Research, Cambridge, MA, USA\*\*USA JOURNAL: Blood 98 (11 Part 2): p42b November 16, 2001 2001 MEDIUM: print CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of Hematology, Part 2 Orlando, Florida, USA December 07-11, 2001; 20011207 SPONSOR: American Society of Hematology ISSN: 0006-4971 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: PD-1 is a transmembrane protein containing an immunoreceptor tyrosine-based inhibitory motif, and is expressed on activated lymphoid and myeloid cells. Studies using PD-1-deficient mice have shown that PD-1

is involved in the maintenance of peripheral self-tolerance by negatively regulating immune responses. Two new members of the \*\*\*B7\*\*\* gene family, \*\*\*PD\*\*\* - \*\*\*L2\*\*\* , have been identified as ligands for PD-1. Engagement of PD-1 by PD-L1 inhibits T cell receptor-mediated proliferation of T cells and cytokine secretion. We have demonstrated that PD-L1 is constitutively expressed in murine tumor cells, and that this expression is highly regulated in vitro by IFN-g. Therefore, we speculated that in vivo PD-1/PD-L1 interactions may downregulate antitumor immune responses leading to ineffective tumor immunosurveillance. In this report we studied the role of in vivo PD-1/PD-L1 interactions in various murine tumor models. We have used either recombinant costimulatory fusion proteins for systemic treatment, or retrovirally transduced tumor cells, co-expressing green fluorescent protein (GFP) and PD-1 or PD-L1. Our results demonstrate: (i) systemic treatment of MethA or MB49 inoculated mice with soluble PDL1-Fc fusion protein (50ug/injection twice weekly, for 3 weeks) does not alter the pattern of in vivo tumor growth as compared to treatment with control IgG; (ii) treatment with PDL1-Fc or control IgG during the priming/effector phase in a B16F1 vaccination model leads to 20% protection against wild-type (wt) challenge; (iii) live wt or PD-L1 transduced MethA cells do not downregulate in vivo antitumor responses, and are rejected by either naive allogeneic recipients (C57BL/6, SJL/J), or by syngeneic recipients (Balb/c) with antitumnor memory CTL; similarly, PD-L1 expressing MethA cells cultured in vitro with allogeneic T cells do not significantly downregulate T cell proliferation when

compared to GFP or PD-1 expressing MethA cells; (iv) mice vaccinated once with irradiated PDL1- or GFP-B16F1 cells and challenged a week later with live wt B16F1 cells show 20% protection; and (v) live wt B16F1, GFP-, and PD-L1-tranduced B16F1 cells are rejected by syngeneic B cell-deficient C57BL/6 mice. Overall, our results suggest that in vivo PD-1/PD-L1 interactions do not have a clinically detectable downregulatory effect on immune mechanisms regulating tumor growth or tumor rejection.

9/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0013238309 BIOSIS NO.: 200100410148

PD-L2 is a second ligand for PD-1 and inhibits T cell activation

AUTHOR: Latchman Yvette; Wood Clive R; Chernova Tatyana; Chaudhary Divya; Borde Madhuri; Chernova Irene; Iwai Yoshiko; Long Andrew J; Brown Julia A; Nunes Raquel; Greenfield Edward A; Bourque Karen; Boussiotis Vassiliki A; Carter Laura L; Carreno Beatriz M; Malenkovich Nelly; Nishimura Hiroyuki; Okazaki Taku; Honjo Tasuku; Sharpe Arlene H; Freeman Gordon J (Reprint)

AUTHOR ADDRESS: Department of Adult Oncology, Department of Medicine, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, 02115, USA\*\*USA

JOURNAL: Nature Immunology 2 (3): p261-268 March, 2001 2001

MEDIUM: print ISSN: 1529-2908

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Programmed death 1 (PD-1)-deficient mice develop a variety of autoimmune-like diseases, which suggests that this immunoinhibitory receptor plays an important role in tolerance. We identify here PD-1 ligand 2 (PD-L2) as a second ligand for PD-1 and compare the function and expression of PD-L1 and \*\*\*PD\*\*\* \*\*\*L2\*\*\* . Engagement of PD-1 by PD-L2 dramatically inhibits T cell receptor (TCR)-mediated proliferation and cytokine production by CD4+ T cells. At low antigen concentrations, PD-L2-PD-1 interactions inhibit \*\*\*B7\*\*\* -CD28 signals. In contrast, at high antigen concentrations, PD-L2-PD-1 interactions reduce cytokine production but do not inhibit T cell proliferation. PD-L-PD-1 interactions lead to cell cycle arrest in GO/G1 but do not increase cell death. In addition, ligation of PD-1+TCR leads to rapid phosphorylation of SHP-2, as compared to TCR ligation alone. PD-L expression was up-regulated on antigen-presenting cells by interferon gamma treatment and was also present on some normal tissues and tumor cell lines. Taken together, these studies show overlapping functions of PD-L1 and PD-L2 and indicate a key role for the PD-L-PD-1 pathway in regulating T cell responses.

9/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0013106826 BIOSIS NO.: 200100278665
PD-L2, a novel B7 homologue, is a second ligand for PD-1
 and inhibits T cell activation
AUTHOR: Latchman Yvette (Reprint); Wood Clive; Chernova Tatyana; Iwai
 Yoshiko; Malenkovich Nelly; Long Andrew; Bourque Karen; Boussiotis
 Vassiliki; Nishimura Hiroyuki; Honjo Tasuku; Sharpe Arlene (Reprint);

Freeman Gordon

AUTHOR ADDRESS: Brigham and Womens Hospital and Harvard Medical School, 221 Longwood Ave, LMRC-5, Boston, MA, 02115, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: PD-1 is a member of the immunoglobulin superfamily and CD28 homologue which contains an immunoreceptor tyrosine-based inhibitory motif (ITIM), in its cytoplasmic tail. PD-1 deficient mice develop a variety of autoimmune diseases suggesting that this immunoinhibitory receptor plays an important role in tolerance. Recently, a homologue, PD-1 ligand 1 (PD-L1) has been identified as a ligand for PD-1. Here we present the initial identification and characterization of a novel B7 homologue, PD-L2, that is a second ligand for PD-1, and compare the expression and function of PD-L1 and PD-\*\*\*L2\*\*\* . Murine \*\*\* $p_{D^{***}}$  - \*\*\*L2\*\*\* shares 38% amino acid identity to murine PD-L1. Distribution of human and murine \*\*\*PD\*\*\* - \*\*\*L2\*\*\* normal tissues is similar to PD-L1 with high levels in placenta, and low levels in spleen, lymph nodes, and thymus. In addition, some tissues, such as human pancreas, lung and liver, expressed PD-L2 but not PD-L1. \*\*\*PD\*\*\* - \*\*\*L2\*\*\* mRNA was not detected in unstimulated human monocytes but was upregulated by IFN-gamma stimulation. The induction of PD-L2 was slightly delayed in kinetics as compared to the upregulation of PD-L1. Engagement of PD-1 by \*\*\*PD\*\*\* dramatically inhibits TCR mediated proliferation and cytokine production by CD4+ T cells. At low antigen concentrations, \*\*\*PD\*\*\* - \*\*\*L2\*\*\* :PD-1 interaction inhibits strong \*\*\*B7\*\*\* :CD28 signals. In contrast, at high antigen concentrations, PD-L2:PD-1 interaction markedly reduced cytokine production but does not inhibit T cell proliferation. These results further demonstrate the capacity of the PD-L:PD-1 pathways to antagonize a strong  ${f B7}/{f CD28}$  signal when antigenic stimulation is weak or limiting. PD-L:PD-1 interactions lead to cell cycle arrest in GO/G1, but do not increase cell death. Taken together, these studies demonstrate overlapping functions of PD-L1 and PD-L2 and indicate a key role for the PD-L1/PD-L2:PD-1 pathway in regulating T cell responses. 9/7/4 (Item 4 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278664 0013106825 Expression and functional consequences of PD-1 ligands on natural APCS and AUTHOR: Brown Julia A (Reprint); Dorfman David M; Butler Marcus (Reprint); Nunes Raquel (Reprint); Latchman Yvette; Long Andrew J; Iwai Yoshiko; Bourque Karen; Boussiotis Vassiliki A (Reprint); Chernova Tatyana (Reprint); Nishimura Hiroyuki; Fitz Lori; Malenkovich Nelly (Reprint); Honjo Tasuku; Wood Clive R; Nadler Lee M (Reprint); Sharpe Arlene H; Freeman Gordon J (Reprint) AUTHOR ADDRESS: Dana-Farber Cancer Institute, 44 Binney St, Boston, MA, 02115, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida,

USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: PD-1 is a cell surface receptor structurally related to CD28 and CTLA4 and is expressed on activated lymphoid and myeloid cells. PD-1 contains an ITIM motif and has a role in the negative regulation of immune responses. Mice deficient in PD-1 have multiple autoimmune features and appear to have a breakdown in peripheral tolerance. We have identified two novel members of the B7 gene family, PD-L1 and \*\*\*PD\*\*\* - \*\*\*L2\*\*\* , as ligands of PD-1. Engagement of PD-1 by PD-Ligand dramatically inhibits TCR stimulated proliferation and cytokine production by T cells. Immunohistochemistry with PD-L1 specific mAb showed that PD-L1 is highly expressed in several organs including placental trophoblasts, myocardial endothelial lining, and thymic epithelial cells. PD-L1 is not expressed on unstimulated antigen presenting cells but is induced on dendritic cells and monocytes by pro-inflammatory cytokines such as interferon-g suggesting a role for PD-L1 in limiting T cell responses. PD-L1 is also expressed on some tumors including most lung and breast malignancies and many ovarian tumors, suggesting a role in attenuating immune attack against these tumors. Blockade of PD-L1 led to modestly increased proliferation and substantial increases in cytokine production. The relative levels of inhibitory PD-L1 and stimulatory B7-1 and B7-2 molecules on antigen presenting cells may determine the threshold between tolerance and autoimmunity. PD-Ligand expression on tumors may allow them to attenuate an anti-tumor immune response. This discovery extends the B7 family of molecules and their role in immunoregulation and identifies new targets for therapeutic modulation of the immune response. 9/7/5 (Item 5 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013106824 BIOSIS NO.: 200100278663

B7-H3, a novel member of the B7 family that costimulates T cell responses and selectively enhances interferon-gamma production AUTHOR: Chapoval Andrei I (Reprint); Ni Jian; Lau Julie S (Reprint); Wilcox Ryan A (Reprint); Flies Dallas B (Reprint); Liu Ding; Dong Haidong (Reprint); Sica Gabriel L (Reprint); Zhu Gefeng (Reprint); Tamada Koji (Reprint); Chen Lieping (Reprint) AUTHOR ADDRESS: Mayo Clinic, 200 First Street SW, Rochester, MN, 55905, USA \*\*USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 **2001** MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: Costimulation, in addition to TCR engagement, is required for optimal activation of T cells. The most extensively studied costimulatory molecules belong to the B7 family, which includes well known ( B7-1 and B7-2) and recently described (B7-H1 and \*\*\*B7\*\*\* - \*\*\*H2\*\*\* ) molecules. We discovered a novel member of the human B7 family, designated B7-H3 that shares 20-27% amino acid identity with other \*\*\*B7\*\*\* family members. \*\*\*B7\*\*\* -H3 mRNA was not detectable in peripheral blood mononuclear cells although it was found in various normal tissues and in several tumor lines. \*\*\*B7\*\*\* -H3 was expressed on the surface of GM-CSF derived macrophages and IFN-gamma

stimulated dendritic cells. In addition, stimulation by a combination of phorbol myristate acetate and ionomycin induces surface expression of \*\*\*B7\*\*\* -H3 on CD3+ T cells. Soluble \*\*\*B7\*\*\* -H3 protein bound a putative counter-receptor on PHA-activated T cells distinct from CD28, CTLA-4, ICOS, and PD-1. \*\*\*B7\*\*\* -H3 costimulated proliferation of both CD4+ and CD8+ T cells, enhanced the induction of cytotoxic T cells, and selectively enhanced IFN-gamma production in the presence of T cell receptor signaling. Thus, our results identified additional family molecule that may participate in the regulation of cell-mediated immune responses. (Item 6 from file: 5) 5:Biosis Previews(R) DIALOG(R)File (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278651 Costimulation of tumor immunity by B7-H2, a ligand for ICOS AUTHOR: Wang Shengdian (Reprint); Zhu Gefeng (Reprint); Wilcox Ryan (Reprint); Chen Lieping (Reprint) AUTHOR ADDRESS: Mayo Clinic, 200 First Street, SW, Rochester, MN, 55905, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: Costimulatory interactions between the B7 family ligands and their receptors play critical roles in the growth, differentiation, and death of T cells. We have recently identified a new member of family designated as \*\*\*B7\*\*\* - \*\*\*H2\*\*\* is a type 1 transmembrane protein with apprx24%, apprx21% and apprx21% amino acid identity to B7-1, B7-2 and B7-H1 respectively, but with apprx46% amino acid identity to mouse B7h/ B7RP-1, FACS analysis showed that B7-H2 protein is expressed on the surface of monocyte-derived immature dendritic cells. B7-H2Ig binds ICOS on activated T cells and costimulates T-cell proliferation in the presence of suboptional cross-linking CD3. A moderate increase of IL-10 production was only observed in the culture when optimal doses, but not suboptimal doses of anti-CD3 mAb was used, whereas B7-H2 costimulation moderately increased the production of IL-2 in the presence of suboptimal or optimal doses of CD3 signal. Administration of \*\*\*B7\*\*\* -H2Ig enhances CTL activity against E.G7 tumor cells and expends E.G7-specific CD8+ T cells in vivo. Our study identifies a putative ligand for ICOS T-cell costimulatory molecule and suggests a regulatory function of B7-H2/ICOS interaction in the cell-mediated tumor immunity. 9/7/7 (Item 7 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013104890 BIOSIS NO.: 200100276729 Characterization of ICOS-ligand splice variants AUTHOR: Ling Vincent (Reprint); Wu Paul W (Reprint); Miyashiro Joy S

(Reprint); Marusic Suzana (Reprint); Finnerty Heather F (Reprint);

Collins Mary (Reprint)

AUTHOR ADDRESS: Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA

JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The process of immunological costimulation between antigen presenting cells and T-cells is mediated by B7/CD28 and ICOS-ligand/ICOS receptor interactions. In this study, we describe the 3' RACE cloning of a novel ICOS-ligand transcript variant. GL50-B, in addition to the previously reported mouse ICOS-ligand GL50 (Genbank AF199027). mGL50-B encodes a protein product with a divergent 27 amino acid intracellular domain when compared to mGL50. Both mGL50 and mGL50-B transfected cells exhibited binding to human and mouse ICOS-lg fusion protein indicating that the alternate cytoplasmic domain of mGL50-B does not prevent interactions with ICOS receptor. Whereas mGL50 hybridization signal is detected in all tissues examined by RNA blot analysis, mGL50-B transcripts were primarily detected in spleen, ES cell and embryonic tissue samples with lower levels detected in heart and kidney samples. Flow cytometry of Balb/C and RAGI -/- mouse splenocyte subsets using ICOS-Ig combined with RT-PCR analysis of either CD19+, CD4+, CD11b+ or CD11c+ enriched cell populations demonstrated that freshly isolated B-cells, T-cells, macrophage and dendritic cells express both GL50 and GL50-B ICOS-ligand variants. Comparative analysis of the human ICOS-ligand splice variants hGL50 (AF199028) and B7-H2 (AF289028) by RT-PCR revealed a broad tissue distribution of B7-H2 transcripts while hGL50 transcripts were detected mainly in lymph node, leukocyte and splenic RNA samples. The presence of multiple ICOS-ligand splice variants in mouse and humans systems suggests that tissue-specific splice variation may be a method of signal control in the ICOS pathway of the immune system.

9/7/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012796803 BIOSIS NO.: 200000515116

Costimulation of T cells by B7-H2, a B7-like molecule

that binds ICOS

AUTHOR: Wang Shengdian; Zhu Gefeng; Chapoval Andrei I; Dong Haidong; Tamada Koji; Ni Jian; Chen Lieping (Reprint)

AUTHOR ADDRESS: Department of Immunology, Mayo Clinic, 200 First St SW,

Rochester, MN, 55905, USA\*\*USA

JOURNAL: Blood 96 (8): p2808-2813 October 15, 2000 2000

MEDIUM: print ISSN: 0006-4971

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: This report describes a new human **B7**-like gene designated \*\*\*B7\*\*\* - \*\*\*H2\*\*\* . Cell surface expression of \*\*\*B7\*\*\* - \*\*\*H2\*\*\* protein

is detected in monocyte-derived immature dendritic cells. Soluble B7-H2 and immunoglobulin (Ig) fusion protein, B7-H2Ig, binds activated but not resting T cells and the binding is abrogated by inducible costimulator Ig (ICOSIg), but not CTLA4Ig. In addition, ICOSIg

stains Chinese hamster ovary cells transfected with B7-H2
gene. By suboptimal cross-linking of CD3, costimulation of T-cell
proliferation by B7-H2Ig is dose-dependent and correlates with
secretion of interleukin (IL)-2, whereas optimal CD3 ligation
preferentially stimulates IL-10 production. The results indicate that
\*\*\*B7\*\*\* - \*\*\*H2\*\*\* is a putative ligand for the ICOS T-cell molecule.

9/7/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0010521169 BIOSIS NO.: 199699155229
Allogeneic lymphocyte responses to B7-1 expressing human cancer cell lines
AUTHOR: Dessureault Sophie; Gallinger Steven (Reprint)
AUTHOR ADDRESS: Mt. Sinai Hosp., 1225-600 University Ave., Toronto, ON M5G 1X5, Canada\*\*Canada
JOURNAL: Journal of Surgical Research 64 (1): p42-48 1996 1996
ISSN: 0022-4804
DOCUMENT TYPE: Article

RECORD TYPE: Abstract LANGUAGE: English

9/7/10

ABSTRACT: Recent studies suggest that expression of B7-1 by tumor cells is effective at inducing antitumor immune responses. Our purpose was to transfect three human cancer cell lines (MEWO, WM35, and H125) with a B7-1 expression plasmid and test the immunogenicity of these modified cancer cells using allogeneic human peripheral blood lymphocytes (PBLs). PBLs were tested in vitro for both proliferative and cytotoxic activity against parental and \*\*\*B7\*\*\* -transfected tumor cells. (3H) thymidine lymphocyte proliferation assays showed that PBLs incubated with B7-1+ WM35 (major histocompatibility complex (MHC) class I-II- melanoma) demonstrated a substantial increase in T cell proliferation (P lt 0.0005), but PBLs incubated with \*\*\*B7\*\*\* class I-II melanoma) and H125 (MHC class I+II- lung adenosquamous carcinoma) did not. T cell-mediated cytotoxicity was not increased against B7-1+ tumor cells: effector T lymphocytes primed against B7-1+ tumor cells did not show any increase in cytolytic activity \*\*\*B7\*\*\* -1+ or \*\*\*B7\*\*\* -1 target cells. NK cells did against 51Cr-labeled not lyse MEWO cells, but they did kill H125 and WM35 targets. \*\*\*B7\*\*\* expression on MEWO and WM35 cells did not result in enhanced lysis by NK cells, but NK cytotoxicity was enhanced by B7-1 expression on H125 cells (P lt 0.01). The observation that NK cytotoxicity is enhanced by B7-1+ H125 cells suggests that B7-1/CD28 interactions may be important in NK cytotoxic activity. We conclude that \*\*\*B71\*\*\* cells, which express both MHC molecules and antigenic epitopes, elicit an improved alloantigen-induced T cell proliferative response, presumably because they have the capacity to deliver an adequate antigen-specific signal which can be costimulated by \*\*\*B7\*\*\* -1/CD28 interaction.

DIALOG(R)File 5:Biosis Previews(R)

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0010161812 BIOSIS NO.: 199698629645

Maturation of neonatal human CD4 T cells: III. Role of \*\*\*B7\*\*\*
 co-stimulation at priming

AUTHOR: Yang Liang-Peng; Demeure Christian E; Byun Dae-Gyoo; Vezzio Nadia; Delespesse Guy (Reprint)

AUTHOR ADDRESS: Allergy Res. Lab., Cent. Recherche Louis-Charles Simard, Notre-Dame Hosp., Univ. Montreal, 1560 Sherbrooke St. East, Montreal, Ouebec H2L 4M1, Canada\*\*Canada

(Item 10 from file: 5)

JOURNAL: International Immunology 7 (12): p1987-1993 1995 1995

ISSN: 0953-8178

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: We previously reported that human naive CD4 T cells differentiate into effector cells producing type 1 (IL-2, IFN-gamma) and type 2 (IL-4, IL-5, IL-10) cytokines after priming with anti-CD3 mAb presented on irradiated CD32-transfected mouse L fibroblasts, in the absence of exogenous cytokine. Here we first show that the CD32 L fibroblasts act not only by cross-linking anti-CD3 mAb but also by providing a B7 -mediated co-stimulation signal which is required for the activation of naive T cells. Using a selected anti-CD3 mAb (64.1) we next demonstrate that colligation of CD3 and CD28 with soluble mAb is sufficient to activate highly purified naive CD4 T cells for proliferation, IL-4 mRNA expression, IL-4 secretion, and maturation into IL-4- and IL-5-producing cells. Finally, we show that the intensity of \*\*\*B7\*\*\* co-stimulation at priming markedly affects the lymphokine-producing phenotype of primed cells. Indeed, cells primed on CD32- \*\*\*B7\*\*\* double L transfectants produce much more IL-4 and IL-5 and slightly less IFN-gamma than those primed on CD32 L cells. The enhanced IL-4/IL-5-producing capacity of cells primed on CD32-B7 L fibroblasts may be related to increased IL-4 production during priming. It is suggested that the maturation of naive T cells along the T-h2 or T-h1 pathway may be regulated by the level of \*\*\*B7\*\*\* expressed on APC.

9/7/11 (Item 11 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0007103574 BIOSIS NO.: 199089021465
SYNTHESIS OF A7 **B7** DICARBAINSULIN AN ANALOGUE WITH A NONCLEAVABLE
BOND BETWEEN A AND B-CHAIN II. SYNTHESIS OF THE A-CHAIN SEGMENTS
AUTHOR: VIDENOV G (Reprint); STOEV S; BRANDENBURG D
AUTHOR ADDRESS: DEUTSCHES WOLLFORSCHUNGSINSTUT AND DER TECHNISCHEN
HOCHSCHULE AACHEN, VELTMANPLATZ 8, D-5100 AACHEN\*\*GERMANY
JOURNAL: Biological Chemistry Hoppe-Seyler 370 (10): p1103-1112 1989
ISSN: 0177-3593
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ABSTRACT: As part of the total synthesis of [A7,B7-L -L-2,7-diaminosuberoyl]-des-(B26-B30)-insulin B25-amide, an insulin analogue containing a non-cleavable bond between A- and B-chain, the chemical synthesis of the A-chain segment is described. The N-terminal sequence A(1-6), Boc-Gly-Ile-Val-Glu-(OBu)-Gln-Cys(SBu)-NH-NH2, was synthesized in solution. The middle segment A98-16), Ddz-Thr(Bu)-Ser(Bu)-Ile-Cys(SBu)-Ser(Bu)-Leu-Tyr-(Bu)-Gln-Leu-NH-NH2, was obtained by solid phase synthesis according to the Fmoc strategy. The C-terminal segment A(17-21), Bpoc-Glu(OBu)-Asn-Tyr-Cys(Acm)-AsnOOBu, was prepared in solution.

9/7/12 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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11189331 EMBASE No: 2001208376
Differential expression of inducible costimulator-ligand splice variants:
Lymphoid regulation of mouse GL50-B and human GL50 molecules
Ling V.; Wu P.W.; Miyashiro J.S.; Marusic S.; Finnerty H.F.; Collins M.

Dr. V. Ling, Department of Immunology, Genetics Institute, 87
CambridgePark Drive, Cambridge, MA 02081 United States
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Journal of Immunology ( J. IMMUNOL. ) (United States) 15 JUN 2001, 166/12 (7300-7308)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 29

The process of immunological costimulation between APC and T cells is mediated by protein ligand:receptor interactions. To date, costimulatory receptors known to be expressed by T cells include the structurally related proteins CD28 and the inducible costimulator (ICOS). The ligands to human and mouse ICOS, human GL50 (hGL50), and mouse GL50 (mGL50) were recently cloned and demonstrated to have sequence similarity to the CD28 ligands \*\*\*B7\*\*\* -2. Examination of mGL50 cDNA transcripts by \*\*\*B7\*\*\* -1 and 3primeRACE revealed an alternatively spliced form, mGL50-B, that encoded a protein product with a divergent 27-aa intracellular domain. Both mGL50and mGL50-B-transfected cells exhibited binding to human and mouse ICOS-Ig fusion protein, indicating that the alternate cytoplasmic domain of mGL50-B does not interfere with extracellular interactions with ICOS receptor. Flow cytometric and RT-PCR analysis of BALB/c and RAG1SUP-/- mice splenocytes demonstrate that freshly isolated B cells, T cells, macrophages, and dendritic cells express both splice variant forms of ICOS ligand. Comparative analyses with the human ICOS ligand splice variants hGL50 and B7-H2 indicate that differential splicing at the junction of cytoplasmic exon 6 and exon 7 may be a common method by which GL50-ICOS immunological costimulatory processes are regulated in vivo.

(Item 2 from file: 73) 9/7/13 DIALOG(R) File 73: EMBASE (c) 2004 Elsevier Science B.V. All rts. reserv. EMBASE No: 1999136316 07673780 Enhancement of B7-1 (CD80) expression on B-lymphoma cells by irradiation Seo A.; Ishikawa F.; Nakano H.; Nakazaki H.; Kobayashi K.; Kakiuchi T. Dr. T. Kakiuchi, Department of Immunology, Toho University School of Medicine, 5-21-16 Omori-nishi, Ota-ku, Tokyo 143-8540 Japan Immunology (IMMUNOLOGY) (United Kingdom) 1999, 96/4 (642-648) ISSN: 0019-2805 CODEN: IMMUA DOCUMENT TYPE: Journal; Article SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH NUMBER OF REFERENCES: 40

Irradiation of A20.2J mouse B-lymphoma cells enhanced their antigenpresenting ability to induce interleukin-2 (IL-2) production by 42-6A T cells specific for ovalbumin (OVA) inf 3inf 2inf 3inf -inf 3inf 3inf 9/I-A(d). Irradiated and fixed A20.2J cells were more efficient antigen-presenting cells (APC) to present OVAinf 3inf 2inf 3inf -inf 3inf 3inf 9 peptide than the unirradiated and fixed cells. Irradiation selectively increased the expression of B7-1 molecules, but not of the major histocompatibility complex class II molecules, B7-2, lymphocyte function- associated antigen-1, or intracellular adhesion molecule-1. Irradiation of A20.2J cells with 100 Gy followed by overnight incubation was optimal for the enhancement of \*\*\*B7\*\*\* -1 expression. Anti-B7-1 monoclonal antibody inhibited the irradiation-induced enhancement of APC function. Irradiation of A20.2J cells induced the \*\*\*B7\*\*\* -1 mRNA. Thus, it was concluded that the accumulation of enhancement of APC function by irradiation was due to the up-regulation of molecules through the accumulation of its mRNA. Although \*\*\*B7\*\*\* - \*\*\*1\*\*\* partial inhibition of protein synthesis has been shown to enhance the

accumulation of B7-1 mRNA and its expression, irradiation did not decrease the protein synthesis in A20.2J cells. The incubation with irradiated A20.2J cells stimulated unirradiated A20.2J cells to increase \*\*\*B7\*\*\* -1 expression, suggesting that irradiation of A20.2J cells induced expression or secretion of some molecule(s) to enhance B7-1 expression.

(Item 3 from file: 73) 9/7/14 DIALOG(R) File 73: EMBASE (c) 2004 Elsevier Science B.V. All rts. reserv. 07459262 EMBASE No: 1998377904 L-selectin and beta7 integrin synergistically mediate lymphocyte migration to mesenteric lymph nodes Wagner N.; Lohler J.; Tedder T.F.; Rajewsky K.; Muller W.; Steeber D.A. N. Wagner, Institute for Genetics, University of Cologne, Weyertal 121, D-50937 Cologne Germany AUTHOR EMAIL: n.wagner@uni-koeln.de European Journal of Immunology (EUR. J. IMMUNOL. ) (Germany) 28/11 (3832-3839) CODEN: EJIMA ISSN: 0014-2980 DOCUMENT TYPE: Journal; Article SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH NUMBER OF REFERENCES: 31

Mesenteric lymph nodes (MLN) drain the gut where nutritive antigens and pathogens are encountered by lymphocytes of the gut-associated lymphoid tissue. We sought to determine how lymphocytes enter the MLN by studying mice double deficient for beta7 integrins and L-selectin. \*\*\*B7\*\*\* \*\*\*T,\*\*\* -selectin double-deficient lymphocytes did not migrate into MLN. Most importantly, MLN formation was drastically impaired in beta7/L-selectin double-deficient mice. Lymphocyte numbers in MLN from beta7/L-selectin double-deficient mice were tenfold reduced compared to control mice. A high percentage of the few lymphocytes still detected in MLN from beta7/L-selectin double-deficient mice were CD44(hi)CD18(hi), suggesting alternate migration pathways independent of L-selectin and beta7 integrin for these cells. We conclude that the combination of both molecules, L-selectin and beta7 integrin, is indispensable for MLN formation and that these molecules may mediate lymphocyte migration to MLN in a sequential and synergistical manner.

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9/7/15
            (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2004 American Chemical Society. All rts. reserv.
               CA: 134(16)218032u
                                     PATENT
  Cloning and characterization of a B7 homolog 3 (B7-H3) protein and its
therapeutic application
  INVENTOR (AUTHOR): Ruben, Steven M.; Chen, Lieping; Baker, Kevin; Ni, Jian
  ASSIGNEE: Human Genome Sciences, Inc.; Mayo Clinic
  PATENT: PCT International; WO 200118021 A1 DATE: 20010315
  APPLICATION: WO 2000US23792 (20000830) *US PV152317 (19990903) *US
PV200346 (20000428)
  PAGES: 252 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A;
C12N-001/21B; C12N-015/00B; C12N-015/63B; C07K-014/46B; C07K-014/52B;
A61K-038/00B; C12Q-001/68B; G01N-033/53B DESIGNATED COUNTRIES: AE; AG; AL;
AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CR; CU; CZ; DE; DK; DM;
DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP;
KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ;
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ;
VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH
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; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES;
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN;
GW; ML; MR; NE; SN; TD; TG
  SECTION:
CA203003 Biochemical Genetics
CA201XXX Pharmacology
CA213XXX Mammalian Biochemistry
CA215XXX Immunochemistry
  IDENTIFIERS: human B7 homolog 3 B7H3 cDNA sequence, T cell activation
costimulatory receptor B7H3
  DESCRIPTORS:
T cell(lymphocyte)...
    activation in the presence of B7-H3; cloning and characterization of a
    B7 homolog 3 (B7-H3) protein and therapeutic application
Antiqens...
    B7-H2/GL50; cloning and characterization of a B7 homolog 3 (B7-H3)
    protein and therapeutic application
Antigens...
    B7-H3, of human; cloning and characterization of a B7 homolog 3 (B7-H3)
    protein and therapeutic application
Immunoglobulins...
    B7-H3Ig, for T cell activation; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
Antigens...
    B7-1H; cloning and characterization of a B7 homolog 3 (B7-H3) protein
    and therapeutic application
Glycoproteins, specific or class...
    CD40-L (antigen CD40 ligand), receptor for, costimulation in the
    presence of B7-H3; cloning and characterization of a B7 homolog 3
    (B7-H3) protein and therapeutic application
Antibodies... CD80(antigen)... CD86(antigen)... Cell proliferation... Drug
screening... Gene therapy... Molecular cloning... Nucleic acid
hybridization... Primers (nucleic acid)... Probes (nucleic acid)... TCR (T
cell receptors)...
    cloning and characterization of a B7 homolog 3 (B7-H3) protein and
    therapeutic application
cDNA sequences... Gene, animal...
    for Antigen B7-H3, of human; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
TCR(T cell receptors)...
    for OX40, costimulation in the presence of B7-H3; cloning and
    characterization of a B7 homolog 3 (B7-H3) protein and therapeutic
    application
Cytokines...
    inflammatory; cloning and characterization of a B7 homolog 3 (B7-H3)
    protein and therapeutic application
Diagnosis...
    mol.; cloning and characterization of a B7 homolog 3 (B7-H3) protein
    and therapeutic application
Protein sequences...
    of Antigen B7-H3, of human; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
    of B7-H3, tissue distribution; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
    4-1BB, costimulation in the presence of B7-H3; cloning and
    characterization of a B7 homolog 3 (B7-H3) protein and therapeutic
    application
  CAS REGISTRY NUMBERS:
328597-16-6P amino acid sequence; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
328596-73-2 nucleotide sequence; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and therapeutic application
```

```
229477-44-5 328596-22-1 unclaimed nucleotide sequence; cloning and
    characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic
    application
328601-76-9 329752-99-0 329753-00-6 unclaimed protein sequence; cloning
    and characterization of a B7 homolog 3 (B7-H3) protein and its
    therapeutic application
328529-70-0 329685-07-6 329753-02-8 329753-03-9 329753-04-0
    329753-05-1 unclaimed sequence; cloning and characterization of a B7
    homolog 3 (B7-H3) protein and its therapeutic application
Set
        Items
               Description
Sl
          30
               E3-E6
           29
               RD S1 (unique items)
S2
           28
                E1-E5
S3
                (S1 OR S3) AND (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD-
           0
            (W)L2)
S5
          17
                (S1 OR S3) AND B7?
               RD S5 (unique items)
56
          12
               (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7?
S7
          112
               RD S7 (unique items)
S8
          66
              S8 AND PY<2002
S9
          15
? t s8/3/all
          (Item 1 from file: 5)
 8/3/1
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200400210019
0014842386
The low affinity IgE receptor, CD23, expressed on antigen presenting cells
  alters T-cell response to allergen.
AUTHOR: Poole J A (Reprint); Meng J (Reprint); Cao L (Reprint); Bates C
  (Reprint); Rosenwasser L J (Reprint)
AUTHOR ADDRESS: Allergy and Immunology, National Jewish Medical and
  Research Center, Denver, CO, USA**USA
JOURNAL: Journal of Allergy and Clinical Immunology 113 (2 Supplement): p
S210 February 2004 2004
MEDIUM: print
CONFERENCE/MEETING: 60th Annual Meeting of the American Academy of Allergy,
Asthma and Immunology (AAAAI) San Francisco, CA, USA March 19-23, 2004;
20040319
SPONSOR: American Academy of Allergy, Asthma and Immunology
ISSN: 0091-6749
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English
           (Item 2 from file: 5)
 8/3/2
              5:Biosis Previews(R)
DIALOG(R) File
(c) 2004 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200400162304
0014794963
Expression and role of B7 family molecules, B7-H1 and B7-
    ***H2*** , in patients with acute myeloid leukemia.
AUTHOR: Tamura Hideto (Reprint); Ogata Kiyoyuki (Reprint); Yokose Norio
  (Reprint); Nakamura Kyoko (Reprint); Shioi Yumiko (Reprint); Hyodo Hideya
  (Reprint); Tachibana Mikiko (Reprint); Dong Haidong; Wang Shengdian; Chen
  Lieping (Reprint); Dan Kazuo
AUTHOR ADDRESS: Third Department of Internal Medicine, Nippon Medical
  School, Tokyo, Japan**Japan
JOURNAL: Blood 102 (11): p234b November 16, 2003 2003
MEDIUM: print
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of
```

Hematology San Diego, CA, USA December 06-09, 2003; 20031206 SPONSOR: American Society of Hematology ISSN: 0006-4971 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English (Item 3 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200400155439 0014774682 B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. AUTHOR: Matsumoto Koichiro; Inoue Hiromasa (Reprint); Nakano Takako; Tsuda Miyuki; Yoshiura Yuki; Fukuyama Satoru; Tsushima Fumihiko; Hoshino Tomoaki; Aizawa Hisamichi; Akiba Hisaya; Pardoll Drew; Hara Nobuyuki; Yagita Hideo; Azuma Miyuki; Nakanishi Yoichi AUTHOR ADDRESS: Graduate School of Medical Sciences, Research Institute for Diseases of the Chest, Kyushu University, 3-1-1 Maidashi, Higashi-ku, Fukuoka, 812-8582, Japan\*\*Japan AUTHOR E-MAIL ADDRESS: inoue@kokyu.med.kyushu-u.ac.jp JOURNAL: Journal of Immunology 172 (4): p2530-2541 February 15, 2004 2004 MEDIUM: print ISSN: 0022-1767 (ISSN print) DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 4 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0014766525 BIOSIS NO.: 200400133879 Costimulatory molecule expression by pediatric pre-B acute lymphoblastic leukemia cells. AUTHOR: Reid Gregor S D (Reprint); Wynne Kristin (Reprint); Terrett Luke (Reprint); Grubb Stacey (Reprint); Schultz Kirk R (Reprint) AUTHOR ADDRESS: Pediatrics, BC Children's Hospital and UBC, Vancouver, BC, Canada\*\*Canada JOURNAL: Blood 102 (11): p378a November 16, 2003 2003 MEDIUM: print CONFERENCE/MEETING: 45th Annual Meeting of the American Society of Hematology San Diego, CA, USA December 06-09, 2003; 20031206 SPONSOR: American Society of Hematology ISSN: 0006-4971 DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English 8/3/5 (Item 5 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200400085068 0014716299 B7-H1 and B7-H2 expression and regulation in human placental trophoblast cells.

AUTHOR ADDRESS: Department of Anatomy and Cell Biology, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS, 66160,

AUTHOR: Petroff Margaret G (Reprint)

USA\*\*USA

JOURNAL: FASEB Journal 17 (7): pC318 April 14, 2003 2003 MEDIUM: print

CONFERENCE/MEETING: 90th Anniversary Annual Meeting of the American Association of Immunologists Denver, CO, USA May 06-10, 2003; 20030506

SPONSOR: American Association of Immunologists

ISSN: 0892-6638 \_(ISSN print)

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation LANGUAGE: English

8/3/6 (Item 6 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0014661173 BIOSIS NO.: 200400031930

BLOCKADE OF PD-L1, BUT NOT PD-L2 SUPPRESSES THE DEVELOPMENT OF CHRONIC INTESTINAL INFLAMMATION.

AUTHOR: Kanai Takanori (Reprint); Totsuka Teruji; Uraushihara Koji; Makita Shin; Iiyama Ryoichi; Tamura Miho; Nakamura Tetsuya; Hibi Toshifumi; Fukushima Tsuneo; Yagita Hideo; Azuma Miyuki; Chen Lieping; Watanabe Mamoru

AUTHOR ADDRESS: Tokyo, Japan\*\*Japan

JOURNAL: Digestive Disease Week Abstracts and Itinerary Planner 2003 p

Abstract No. T1103 2003 2003

MEDIUM: e-file

CONFERENCE/MEETING: Digestive Disease 2003 FL, Orlando, USA May 17-22, 2003; 20030517

SPONSOR: American Association for the Study of Liver Diseases

American Gastroenterological Association

American Society for Gastrointestinal Endoscopy

Society for Surgery of the Alimentary Tract

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Abstract LANGUAGE: English

8/3/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

0014649374 BIOSIS NO.: 200400016358

Blockade of **B7**-H1 suppresses the development of chronic intestinal inflammation.

AUTHOR: Kanai Takanori (Reprint); Totsuka Teruji; Uraushihara Koji; Makita Shin; Nakamura Tetsuya; Koganei Kazutaka; Fukushima Tsuneo; Akiba Hisaya; Yagita Hideo; Okumura Ko; Machida Utako; Iwai Hideyuki; Azuma Miyuki; Chen Lieping; Watanabe Mamoru

AUTHOR ADDRESS: Department of Gastroenterology and Hepatology, Graduate School, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo, 113-8519, Japan\*\*Japan

AUTHOR E-MAIL ADDRESS: taka.gast@tmd.ac.jp

JOURNAL: Journal of Immunology 171 (8): p4156-4163 October 15, 2003 2003

MEDIUM: print

ISSN: 0022-1767 (ISSN print)

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

8/3/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

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BIOSIS NO.: 200300573111
0014622434
THE EXPRESSION OF CO-STIMULATORY MOLECULES B7H AND B7-H1 ON
  COLONIC EPITHELIAL CELLS AND THEIR FUNCTIONAL ROLE IN T CELL ACTIVATION.
AUTHOR: Nakazawa Atsushi (Reprint); Dotan Iris; Brimnes Jens; Allez
Matthieu; Azuma Miyuki; Mayer Lloyd AUTHOR ADDRESS: New York, NY, USA**USA
JOURNAL: Digestive Disease Week Abstracts and Itinerary Planner 2003 p
Abstract No. S1119 2003 2003
MEDIUM: e-file
CONFERENCE/MEETING: Digestive Disease 2003 FL, Orlando, USA May 17-22,
2003; 20030517
SPONSOR: American Association for the Study of Liver Diseases
        American Gastroenterological Association
        American Society for Gastrointestinal Endoscopy
        Society for Surgery of the Alimentary Tract
DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 9 from file: 5)
 8/3/9
DIALOG(R) File
               5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200300551128
0014594697
Endothelial expression of PD-L1 and PD-L2 down-regulates CD8+ T
  cell activation and cytolysis.
AUTHOR: Rodig Nancy; Ryan Timothy; Allen Jessica A; Pang Hong; Grabie Nir;
  Chernova Tatyana; Greenfield Edward A; Liang Spencer C; Sharpe Arlene H;
  Lichtman Andrew H (Reprint); Freeman Gordon J
AUTHOR ADDRESS: Department of Pathology, Brigham and Women's Hospital, 75
  Francis St, Boston, MA, 02115, USA**USA
AUTHOR E-MAIL ADDRESS: alichtman@rics.bwh.harvard.edu
JOURNAL: European Journal of Immunology 33 (11): p3117-3126 November 2003
2003
MEDIUM: print
ISSN: 0014-2980 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 10 from file: 5)
 8/3/10
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200300524316
0014569419
Preferential contribution of B7-H1 to programmed death-1-mediated
  regulation of hapten-specific allergic inflammatory responses.
AUTHOR: Tsushima Fumihiko; Iwai Hideyuki; Otsuki Noriko; Abe Masaaki;
  Hirose Sachiko; Yamazaki Tomohide; Akiba Hisaya; Yagita Hideo; Takahashi
  Yuzo; Omura Ken; Okumura Ko; Azuma Miyuki (Reprint)
AUTHOR ADDRESS: Department of Molecular Immunology, Graduate School, Tokyo
  Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo,
  113-8549, Japan**Japan
AUTHOR E-MAIL ADDRESS: miyuki.mim@tmd.ac.jp
JOURNAL: European Journal of Immunology 33 (10): p2773-2782 October 2003
MEDIUM: print
ISSN: 0014-2980 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
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(Item 11 from file: 5)
 8/3/11
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200300524308
0014569411
Regulation of PD-1, PD-L1, and PD-L2 expression during normal
  and autoimmune responses.
AUTHOR: Liang Spencer C; Latchman Yvette E; Buhlmann Janet E; Tomczak
  Michal F; Horwitz Bruce H; Freeman Gordon J; Sharpe Arlene H (Reprint)
AUTHOR ADDRESS: Eugene Braunwald Research Center, 221 Longwood Avenue,
  Boston, MA, 02115, USA**USA
AUTHOR E-MAIL ADDRESS: asharpe@rics.bwh.harvard.edu
JOURNAL: European Journal of Immunology 33 (10): p2706-2716 October 2003
2003
MEDIUM: print
ISSN: 0014-2980 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 12 from file: 5)
 8/3/12
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0014568935
           BIOSIS NO.: 200300537654
B7-H2 nucleic acids, members of the B7 family
AUTHOR: Coyle Anthony J (Reprint); Fraser Christopher C; Manning Stephen
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1275 (3): Oct. 21, 2003 2003
MEDIUM: e-file
PATENT NUMBER: US 6635750 PATENT DATE GRANTED: October 21, 2003 20031021
PATENT CLASSIFICATION: 536-235 PATENT ASSIGNEE: Millennium
Pharmaceuticals, Inc. PATENT COUNTRY: USA
ISSN: 0098-1133 _(ISSN print)
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
 8/3/13
           (Item 13 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300522772
0014554053
B7-H2 Polypeptides
AUTHOR: Coyle Anthony J (Reprint); Fraser Christopher C; Manning Stephen
AUTHOR ADDRESS: Boston, MA, USA**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1275 (1): Oct. 7, 2003 2003
MEDIUM: e-file
PATENT NUMBER: US 6630575 PATENT DATE GRANTED: October 07, 2003 20031007
PATENT CLASSIFICATION: 530-350 PATENT ASSIGNEE: Millennium
Pharmaceuticals, Inc. PATENT COUNTRY: USA
ISSN: 0098-1133 (ISSN print)
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 14 from file: 5)
 8/3/14
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DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

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0014523770
           BIOSIS NO.: 200300477725
Differential binding properties of B7-H1 and B7-DC to
 programmed death-1.
AUTHOR: Youngnak Pornpan; Kozono Yuko (Reprint); Kozono Haruo; Iwai
  Hideyuki; Otsuki Noriko; Jin Hisayo; Omura Ken; Yagita Hideo; Pardoll
  Drew M; Chen Lieping; Azuma Miyuki
AUTHOR ADDRESS: Department of Molecular Immunology, Graduate School, Tokyo
  Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo,
  113-8549, Japan**Japan
AUTHOR E-MAIL ADDRESS: yuko.mim@tmd.ac.jp
JOURNAL: Biochemical and Biophysical Research Communications 307 (3): p
672-677 August 1, 2003 2003
MEDIUM: print
ISSN: 0006-291X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
           (Item 15 from file: 5)
 8/3/15
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
0014479966 BIOSIS NO.: 200300437000
       ***B7*** -H3 induces antitumor immunity.
AUTHOR: Sun X; Vale M; Leung E; Kanwar J R; Gupta R; Krissansen G W
AUTHOR ADDRESS: Department of Molecular Medicine and Pathology, Faculty of
  Medicine and Health Science, University of Auckland, Auckland, New
  Zealand**New Zealand
JOURNAL: Gene Therapy 10 (20): p1728-1734 September 2003 2003
MEDIUM: print
ISSN: 0969-7128 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 16 from file: 5)
 8/3/16
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300400403
0014441684
Impaired germinal center formation and recall T-cell-dependent immune
  responses in mice lacking the costimulatory ligand ***B7*** - ***H2***
AUTHOR: Wong Siew-Cheng; Oh Edwin; Ng Chee-Hoe; Lam Kong-Peng (Reprint)
AUTHOR ADDRESS: Institute of Molecular and Cell Biology, 30 Medical Dr,
  Singapore, 117609, Singapore**Singapore
AUTHOR E-MAIL ADDRESS: mcblamkp@imcb.nus.edu.sg
JOURNAL: Blood 102 (4): p1381-1388 August 15, 2003 2003
MEDIUM: print
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 17 from file: 5)
                5:Biosis Previews(R)
DIALOG(R)File
 (c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300337314
 0014380571
 PD-1 Engagement Provides an Inhibitory Signal Which Downregulates T Cell
```

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Alloresponses In Vivo.
AUTHOR: Blazar Bruce R (Reprint); Carreno Beatriz M (Reprint);
  Panoskaltsis-Mortari Angela (Reprint); Carter Laura J (Reprint); Iwai
  Yoshiko (Reprint); Yagita Hideo (Reprint); Nishimura Hiroyuki (Reprint);
  Taylor Patricia A (Reprint)
AUTHOR ADDRESS: Pediatrics BMT, Univ. of Minn Cancer Center, Mpls, MN, USA
  **USA
JOURNAL: Blood 100 (11): pAbstract No. 261 November 16, 2002 2002
MEDIUM: print
CONFERENCE/MEETING: 44th Annual Meeting of the American Society of
Hematology Philadelphia, PA, USA December 06-10, 2002; 20021206
SPONSOR: American Society of Hematology
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 18 from file: 5)
                5:Biosis Previews(R)
DIALOG(R)File
(c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300299739
0014341920
Expression of the costimulatory molecule B7-H2 (inducible
  costimulator ligand) by human airway epithelial cells.
AUTHOR: Kurosawa Shin; Myers Allen C; Chen Lieping; Wang Shengdian; Ni Jian
  ; Plitt James R; Heller Nicola M; Bochner Bruce S; Schleimer Robert P
AUTHOR ADDRESS: Johns Hopkins Asthma and Allergy Center, 5501 Hopkins
  Bayview Circle, Room 3A.62, Baltimore, MD, 21224, USA**USA
AUTHOR E-MAIL ADDRESS: rschleim@jhmi.edu
JOURNAL: American Journal of Respiratory Cell and Molecular Biology 28 (5
): p563-573 May 2003 2003
MEDIUM: print
ISSN: 1044-1549 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 19 from file: 5)
 8/3/19
DIALOG(R) File
                5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300063641
0014104922
A cell-based artificial antigen-presenting cell coated with anti-CD3 and
  CD28 antibodies enables rapid expansion and long-term growth of CD4 T
  lymphocytes.
AUTHOR: Thomas Anna K; Maus Marcela V; Shalaby Waleed S; June Carl H; Riley
  James L (Reprint)
AUTHOR ADDRESS: Abramson Family Cancer Research Institute, University of
  Pennsylvania, 421 Curie Boulevard, 508 BRB II/III, Philadelphia, PA,
  19104, USA**USA
AUTHOR E-MAIL ADDRESS: rileyj@mail.med.upenn.edu
JOURNAL: Clinical Immunology (Orlando) 105 (3): p259-272 December 2002
MEDIUM: print
ISSN: 1521-6616 _(ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
```

(Item 20 from file: 5)

8/3/20

5:Biosis Previews(R) DIALOG(R)File (c) 2004 BIOSIS. All rts. reserv. 0014088084 BIOSIS NO.: 200300045433 Programmed death-1 targeting can promote allograft survival. AUTHOR: Ozkaynak Engin; Wang Liqing; Goodearl Andrew; McDonald Kevin; Qin Shixin; O'Keefe Theresa; Duong Thao; Smith Tammy; Gutierrez-Ramos Jose-Carlos; Rottman James B; Coyle Anthony J; Hancock Wayne W (Reprint) AUTHOR ADDRESS: Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia, 3615 Civic Center Boulevard, 807B Abramson Research Center, Philadelphia, PA, 19104-4318, USA\*\*USA AUTHOR E-MAIL ADDRESS: whancock@mail.med.upenn.edu JOURNAL: Journal of Immunology 169 (11): p6546-6553 December 1, 2002 2002 MEDIUM: print ISSN: 0022-1767 (ISSN print) DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 21 from file: 5) 8/3/21 5:Biosis Previews(R) DIALOG(R) File (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200300033824 0014075105 Expression of programmed death 1 ligands by murine T cells and APC. AUTHOR: Yamazaki Tomohide; Akiba Hisaya; Iwai Hideyuki; Matsuda Hironori; Aoki Mami; Tanno Yuka; Shin Tahiro; Tsuchiya Haruo; Pardoll Drew M; Okumura Ko; Azuma Miyuki; Yagita Hideo (Reprint) AUTHOR ADDRESS: Department of Immunology, Juntendo University School of Medicine, 2-1-1 Hongo, Bunkyo-ku, Tokyo, 113-8421, Japan\*\*Japan AUTHOR E-MAIL ADDRESS: hyagita@med.juntendo.ac.jp JOURNAL: Journal of Immunology 169 (10): p5538-5545 November 15, 2002 2002 MEDIUM: print ISSN: 0022-1767 (ISSN print) DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 22 from file: 5) 8/3/22 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0014029550 BIOSIS NO.: 200200623061 T lymphocytes express B7 family molecules following interaction with dendritic cells and acquire bystander costimulatory properties AUTHOR: Ferlazzo Guido (Reprint); Semino Claudia; Meta Maurizio; Procopio Francesco; Morandi Barbara; Melioli Giovanni AUTHOR ADDRESS: Laboratorio di Immunoterapia, Unita di Immunologia, Istituto Nazionale per la Ricerca sul Cancro, c/o CBA, Largo Rosanna Benzi, 10, I-16132, Genova, Italy\*\*Italy JOURNAL: European Journal of Immunology 32 (11): p3092-3101 November, 2002 MEDIUM: print ISSN: 0014-2980 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 23 from file: 5) 8/3/23

DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.

```
BIOSIS NO.: 200200369093
0013775582
Blockade of PD-1 Ligands on dendritic cells enhances T cell activation and
  cytokine production
AUTHOR: Brown Julia A (Reprint); Chernova Tatyana (Reprint); Dorfman David
  M; Boussiotis Vassiliki A (Reprint); Wood Clive R; Freeman Gordon J
  (Reprint)
AUTHOR ADDRESS: Adult Oncology, Dana Farber Cancer Institute, 44 Binney
  St., Boston, MA, 02115, USA**USA
JOURNAL: FASEB Journal 16 (4): pA710 March 20, 2002 2002
MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists
on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002;
20020420
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 24 from file: 5)
 8/3/24
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200200343956
0013750445
Expression of the costimulatory molecule B7-H2 by human airway
  epithelial cells
AUTHOR: Kurosawa Shin (Reprint); Myers Allen C (Reprint); Chen Lieping; Ni
  Jian; Plitt James R (Reprint); Heller Nicola M (Reprint); Bochner Bruce S
  (Reprint); Schleimer Robert P (Reprint)
AUTHOR ADDRESS: Johns Hopkins Asthma and Allergy Center, 5501 Hopkins
  Bayview Circle, Baltimore, MD, 21224, USA**USA
JOURNAL: FASEB Journal 16 (4): pA676 March 20, 2002 2002
MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the Professional Research Scientists
on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002;
20020420
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 25 from file: 5)
 8/3/25
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 200200333237
0013739726
Negative co-receptors on lymphocytes
AUTHOR: Greenwald Rebecca J (Reprint); Latchman Yvette E (Reprint); Sharpe
  Arlene H (Reprint)
AUTHOR ADDRESS: Immunology Research Division, Department of Pathology,
  Brigham and Women's Hospital, 221 Longwood Avenue, Boston, MA, 02115, USA
JOURNAL: Current Opinion in Immunology 14 (3): p391-396 June, 2002 2002
MEDIUM: print
ISSN: 0952-7915
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Citation
LANGUAGE: English
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(Item 26 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200200333236 0013739725 The right place at the right time: Novel B7 family members regulate effector T cell responses AUTHOR: Liang Linda (Reprint); Sha William C (Reprint) AUTHOR ADDRESS: Division of Immunology, University of California, Berkeley, 441 Life Sciences Addition, Berkeley, CA, 94720, USA\*\*USA JOURNAL: Current Opinion in Immunology 14 (3): p384-390 June, 2002 2002 MEDIUM: print ISSN: 0952-7915 DOCUMENT TYPE: Article; Literature Review RECORD TYPE: Citation LANGUAGE: English (Item 27 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013627872 BIOSIS NO.: 200200221383 PD-1:PD-L inhibitory pathway affects both CD4+ and CD8+ T cells and is overcome by IL-2 AUTHOR: Carter Laura L (Reprint); Fouser Lynette A; Jussif Jason; Fitz Lori ; Deng Bija; Wood Clive R; Collins Mary; Honjo Tasuku; Freeman Gordon J; Carreno Beatriz M AUTHOR ADDRESS: Wyeth-Genetics Institute Inc., 200 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA JOURNAL: European Journal of Immunology 32 (3): p634-643 March, 2002 2002 MEDIUM: print ISSN: 0014-2980 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 28 from file: 5) DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. 0013557974 BIOSIS NO.: 200200151485 The role of in vivo PD-1/PD-L1 interactions in syngeneic and allogeneic antitumor responses in murine tumor models AUTHOR: Zuberek Krystyna (Reprint); Runyon Kathlene (Reprint); Collins Mary (Reprint); Leonard John P (Reprint); Dunussi-Joannopoulos Kyri (Reprint) AUTHOR ADDRESS: Immunology, Genetics Institute/Wyeth-Ayerst Research, Cambridge, MA, USA\*\*USA JOURNAL: Blood 98 (11 Part 2): p42b November 16, 2001 2001 MEDIUM: print CONFERENCE/MEETING: 43rd Annual Meeting of the American Society of Hematology, Part 2 Orlando, Florida, USA December 07-11, 2001; 20011207 SPONSOR: American Society of Hematology ISSN: 0006-4971 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English (Item 29 from file: 5) 8/3/29 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

BIOSIS NO.: 200100410148

PD-L2 is a second ligand for PD-1 and inhibits T cell

0013238309

activation AUTHOR: Latchman Yvette; Wood Clive R; Chernova Tatyana; Chaudhary Divya; Borde Madhuri; Chernova Irene; Iwai Yoshiko; Long Andrew J; Brown Julia A ; Nunes Raquel; Greenfield Edward A; Bourque Karen; Boussiotis Vassiliki A; Carter Laura L; Carreno Beatriz M; Malenkovich Nelly; Nishimura Hiroyuki: Okazaki Taku: Honjo Tasuku: Sharpe Arlene H; Freeman Gordon J (Reprint) AUTHOR ADDRESS: Department of Adult Oncology, Department of Medicine, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, 02115, USA\*\*USA JOURNAL: Nature Immunology 2 (3): p261-268 March, 2001 2001 MEDIUM: print ISSN: 1529-2908 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English (Item 30 from file: 5) 8/3/30 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278665 0013106826 PD-L2, a novel B7 homologue, is a second ligand for PD-1 and inhibits T cell activation AUTHOR: Latchman Yvette (Reprint); Wood Clive; Chernova Tatyana; Iwai Yoshiko; Malenkovich Nelly; Long Andrew; Bourque Karen; Boussiotis Vassiliki; Nishimura Hiroyuki; Honjo Tasuku; Sharpe Arlene (Reprint); Freeman Gordon AUTHOR ADDRESS: Brigham and Womens Hospital and Harvard Medical School, 221 Longwood Ave, LMRC-5, Boston, MA, 02115, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English (Item 31 from file: 5) 8/3/31 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278664 0013106825 Expression and functional consequences of PD-1 ligands on natural APCS and tumors AUTHOR: Brown Julia A (Reprint); Dorfman David M; Butler Marcus (Reprint); Nunes Raquel (Reprint); Latchman Yvette; Long Andrew J; Iwai Yoshiko; Bourque Karen; Boussiotis Vassiliki A (Reprint); Chernova Tatyana (Reprint); Nishimura Hiroyuki; Fitz Lori; Malenkovich Nelly (Reprint); Honjo Tasuku; Wood Clive R; Nadler Lee M (Reprint); Sharpe Arlene H; Freeman Gordon J (Reprint) AUTHOR ADDRESS: Dana-Farber Cancer Institute, 44 Binney St, Boston, MA, 02115, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract LANGUAGE: English (Item 32 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278663 B7-H3, a novel member of the B7 family that costimulates T cell responses and selectively enhances interferon-gamma production AUTHOR: Chapoval Andrei I (Reprint); Ni Jian; Lau Julie S (Reprint); Wilcox Ryan A (Reprint); Flies Dallas B (Reprint); Liu Ding; Dong Haidong (Reprint); Sica Gabriel L (Reprint); Zhu Gefeng (Reprint); Tamada Koji (Reprint); Chen Lieping (Reprint) AUTHOR ADDRESS: Mayo Clinic, 200 First Street SW, Rochester, MN, 55905, USA JOURNAL: FASEB Journal 15 (4): pA345 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English (Item 33 from file: 5) 8/3/33 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100278651 0013106812 Costimulation of tumor immunity by B7-H2, a ligand for ICOS AUTHOR: Wang Shengdian (Reprint); Zhu Gefeng (Reprint); Wilcox Ryan (Reprint); Chen Lieping (Reprint) AUTHOR ADDRESS: Mayo Clinic, 200 First Street, SW, Rochester, MN, 55905, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001 MEDIUM: print CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001; 20010331 ISSN: 0892-6638 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English (Item 34 from file: 5) 8/3/34 DIALOG(R) File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv. BIOSIS NO.: 200100276729 0013104890 Characterization of ICOS-ligand splice variants AUTHOR: Ling Vincent (Reprint); Wu Paul W (Reprint); Miyashiro Joy S (Reprint); Marusic Suzana (Reprint); Finnerty Heather F (Reprint); Collins Mary (Reprint) AUTHOR ADDRESS: Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA, 02140, USA\*\*USA JOURNAL: FASEB Journal 15 (4): pA342 March 7, 2001 2001 MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida,

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USA March 31-April 04, 2001; 20010331
ISSN: 0892-6638
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 35 from file: 5)
 8/3/35
              5:Biosis Previews(R)
DIALOG(R) File
(c) 2004 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200000515116
0012796803
Costimulation of T cells by B7-H2, a B7-like molecule
  that binds ICOS
AUTHOR: Wang Shengdian; Zhu Gefeng; Chapoval Andrei I; Dong Haidong; Tamada
  Koji; Ni Jian; Chen Lieping (Reprint)
AUTHOR ADDRESS: Department of Immunology, Mayo Clinic, 200 First St SW,
  Rochester, MN, 55905, USA**USA
JOURNAL: Blood 96 (8): p2808-2813 October 15, 2000 2000
MEDIUM: print
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
            (Item 36 from file: 5)
 8/3/36
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 199699155229
0010521169
Allogeneic lymphocyte responses to B7-1 expressing human cancer cell
  lines
AUTHOR: Dessureault Sophie; Gallinger Steven (Reprint)
AUTHOR ADDRESS: Mt. Sinai Hosp., 1225-600 University Ave., Toronto, ON M5G
  1X5, Canada**Canada
JOURNAL: Journal of Surgical Research 64 (1): p42-48 1996 1996
ISSN: 0022-4804
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
             (Item 37 from file: 5)
 8/3/37
DIALOG(R) File 5:Biosis Previews(R)
(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 199698629645
0010161812
Maturation of neonatal human CD4 T cells: III. Role of ***B7***
  co-stimulation at priming
AUTHOR: Yang Liang-Peng; Demeure Christian E; Byun Dae-Gyoo; Vezzio Nadia;
  Delespesse Guy (Reprint)
AUTHOR ADDRESS: Allergy Res. Lab., Cent. Recherche Louis-Charles Simard,
  Notre-Dame Hosp., Univ. Montreal, 1560 Sherbrooke St. East, Montreal,
  Ouebec H2L 4M1, Canada**Canada
JOURNAL: International Immunology 7 (12): p1987-1993 1995 1995
ISSN: 0953-8178
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
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(Item 38 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

8/3/38

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(c) 2004 BIOSIS. All rts. reserv.
            BIOSIS NO.: 199089021465
0007103574
SYNTHESIS OF A7 B7 DICARBAINSULIN AN ANALOGUE WITH A NONCLEAVABLE
  BOND BETWEEN A AND B-CHAIN II. SYNTHESIS OF THE A-CHAIN SEGMENTS
AUTHOR: VIDENOV G (Reprint); STOEV S; BRANDENBURG D
AUTHOR ADDRESS: DEUTSCHES WOLLFORSCHUNGSINSTUT AND DER TECHNISCHEN
  HOCHSCHULE AACHEN, VELTMANPLATZ 8, D-5100 AACHEN**GERMANY
JOURNAL: Biological Chemistry Hoppe-Seyler 370 (10): p1103-1112 1989
ISSN: 0177-3593
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH
 8/3/39
            (Item 1 from file: 73)
DIALOG(R) File 73:EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
             EMBASE No: 2003471800
  Endothelial expression of PD-L1 and PD-L2 down-regulates
CD8SUP+ T cell activation and cytolysis
  Rodig N.; Ryan T.; Allen J.A.; Pang H.; Grabie N.; Chernova T.;
Greenfield E.A.; Liang S.C.; Sharpe A.H.; Lichtman A.H.; Freeman G.J.
  A.H. Lichtman, Department of Pathology, Brigham and Women's Hospital, 75
  Francis St., Boston, MA 02115 United States
  AUTHOR EMAIL: alichtman@rics.bwh.harvard.edu
  European Journal of Immunology (EUR. J. IMMUNOL. ) (Germany)
  33/11 (3117-3126)
                 ISSN: 0014-2980
  CODEN: EJIMA
  DOCUMENT TYPE: Journal ; Article
  LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 42
            (Item 2 from file: 73)
 8/3/40
DIALOG(R) File 73: EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
             EMBASE No: 2003433292
  Emerging immunomodulatory therapies targeting the co-stimulatory pathways
for the prevention of transplant rejection
  Ansari M.J.I.; Abdi R.
  M.J.I. Ansari, Brigham and Women's Hospital, Lab. of
  Immunogen./Transplant., 75 Francis Street, Boston, MA 02115 United
  AUTHOR EMAIL: jansari@rics.bwh.harvard.edu
  IDrugs ( IDRUGS ) (United Kingdom)
                                       2003, 6/10 (964-969)
  CODEN: IDRUF ISSN: 1369-7056
  DOCUMENT TYPE: Journal ; Review
  LANGUAGE: ENGLISH
                    SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 84
 8/3/41
            (Item 3 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
             EMBASE No: 2003239609
12128697
  Expression of costimulatory molecules in human neuroblastoma. Evidence
that CD40 + neuroblastoma cells undergo apoptosis following interaction
with CD40L
  Airoldi I.; Lualdi S.; Bruno S.; Raffaghello L.; Occhino M.; Gambini C.;
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Pistoia V.; Corrias M.V.

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Dr. V. Pistoia, Laboratory of Oncology, G Gaslini Institute, Largo G
  Gaslini, 5, 16148 Genova Italy
  AUTHOR EMAIL: vitopistoia@ospedale-gaslini.ge.it
  British Journal of Cancer (BR. J. CANCER) (United Kingdom)
                                                                19 MAY
  2003, 88/10 (1527-1536)
  CODEN: BJCAA ISSN: 0007-0920
  DOCUMENT TYPE: Journal ; Article
                     SUMMARY LANGUAGE: ENGLISH
  LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 50
 8/3/42
            (Item 4 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
11546863
            EMBASE No: 2002116607
  PD-1:PD-L inhibitory pathway affects both CD4SUP+ and CD8SUP+ T cells and
is overcome by IL-2
  Carter L.L.; Fouser L.A.; Jussif J.; Fitz L.; Deng B.; Wood C.R.; Collins
M.; Honjo T.; Freeman G.J.; Carreno B.M.
  L. Carter, Wyeth-Genetics Institute, 200 Cambridge Park Drive, Cambridge,
  MA 02140 United States
  AUTHOR EMAIL: LCarter@genetics.com
  European Journal of Immunology (EUR. J. IMMUNOL. ) (Germany)
  32/3 (634-643)
  CODEN: EJIMA
                 ISSN: 0014-2980
  DOCUMENT TYPE: Journal ; Article
  LANGUAGE: ENGLISH
                     SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 41
 8/3/43
            (Item 5 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
             EMBASE No: 2001208376
11189331
  Differential expression of inducible costimulator-ligand splice variants:
Lymphoid regulation of mouse GL50-B and human GL50 molecules
  Ling V.; Wu P.W.; Miyashiro J.S.; Marusic S.; Finnerty H.F.; Collins M.
  Dr. V. Ling, Department of Immunology, Genetics Institute, 87
  CambridgePark Drive, Cambridge, MA 02081 United States
  AUTHOR EMAIL: vling@genetics.com
  Journal of Immunology ( J. IMMUNOL. ) (United States) 15 JUN 2001,
  166/12 (7300-7308)
  CODEN: JOIMA
               ISSN: 0022-1767
  DOCUMENT TYPE: Journal; Article
  LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 29
            (Item 6 from file: 73)
 8/3/44
DIALOG(R) File 73: EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
             EMBASE No: 1999136316
07673780
  Enhancement of B7-1 (CD80) expression on B-lymphoma cells by
irradiation
  Seo A.; Ishikawa F.; Nakano H.; Nakazaki H.; Kobayashi K.; Kakiuchi T.
  Dr. T. Kakiuchi, Department of Immunology, Toho University School of
  Medicine, 5-21-16 Omori-nishi, Ota-ku, Tokyo 143-8540 Japan
  Immunology (IMMUNOLOGY) (United Kingdom) 1999, 96/4 (642-648)
               ISSN: 0019-2805
  CODEN: IMMUA
  DOCUMENT TYPE: Journal; Article
  LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
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(Item 7 from file: 73)
DIALOG(R) File 73:EMBASE
(c) 2004 Elsevier Science B.V. All rts. reserv.
            EMBASE No: 1998377904
 L-selectin and beta7 integrin synergistically mediate lymphocyte
migration to mesenteric lymph nodes
  Wagner N.; Lohler J.; Tedder T.F.; Rajewsky K.; Muller W.; Steeber D.A.
  N. Wagner, Institute for Genetics, University of Cologne, Weyertal 121,
  D-50937 Cologne Germany
  AUTHOR EMAIL: n.wagner@uni-koeln.de
  European Journal of Immunology (EUR. J. IMMUNOL.) (Germany) 1998,
  28/11 (3832-3839)
  CODEN: EJIMA
                ISSN: 0014-2980
  DOCUMENT TYPE: Journal; Article
                     SUMMARY LANGUAGE: ENGLISH
  LANGUAGE: ENGLISH
 NUMBER OF REFERENCES: 31
 8/3/46
            (Item 1 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
16030244
          PMID: 15098076
  Cloning and Identification of Two Novel Splice Variants of Human PD
  ***L2***
  He Xian-Hui; Liu Yi; Xu Li-Hui; Zeng Yao-Ying
      Laboratory of
                         Tissue Transplantation and Immunology, Jinan
University, Ministry of Education, Guangzhou 510632, China. ozms@jnu.edu.cn
  Sheng wu hua xue yu sheng wu wu li xue bao Acta biochimica et biophysica
                Apr 2004, 36 (4) p284-9, ISSN 0582-9879
Sinica (China)
Journal Code: 20730160R
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: In Data Review
            (Item 2 from file: 155)
 8/3/47
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
           PMID: 14603470
15547226
   Expression of the B7-related molecule ICOSL by human glioma cells
in vitro and in vivo.
  Schreiner Bettina; Wischhusen Jorg; Mitsdoerffer Meike; Schneider Dagmar;
Bornemann Antje; Melms Arthur; Tolosa Eva; Weller Michael; Wiendl Heinz
             of Neurology, University of Tubingen, Medical School,
  Department
Tubingen, Germany.
                         Dec 2003, 44 (3) p296-301, ISSN 0894-1491
  Glia (United States)
Journal Code: 8806785
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: Completed
 8/3/48
            (Item 3 from file: 155)
DIALOG(R) File 155:MEDLINE(R)
(c) format only 2004 The Dialog Corp. All rts. reserv.
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PMID: 12800259 In situ expression and significance of B7 costimulatory molecules within tissues of human gastric carcinoma. Chen Xiao-Li; Cao Xu-Dong; Kang An-Jing; Wang Kang-Min; Su Bao-Shan; Wang Department of Pathology, Second Hospital of Xi'an Jiaotong University, Xi'an 710004, Shaanxi Province, China. chenxiaoli64.student@sina.com World journal of gastroenterology - WJG (China) Jun 2003, 9 p1370-3, ISSN 1007-9327 Journal Code: 100883448 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed 8/3/49 (Item 4 from file: 155) DIALOG(R) File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All rts. reserv. PMID: 12690043 12325590 Muscle fibres and cultured muscle cells express the \*\*\*B7\*\*\* .1/2-related inducible co-stimulatory molecule, ICOSL: implications for the pathogenesis of inflammatory myopathies. Heinz; Mitsdoerffer Meike; Schneider Dagmar; Melms Arthur; Lochmuller Hanns; Hohlfeld Reinhard; Weller Michael Department of Neurology, University of Tubingen, Medical School, Tubingen, Germany. heinz.wiendl@uni-tuebingen.de journal of neurology (England) May 2003, 126 Brain; a Journal Code: 0372537 p1026-35, ISSN 0006-8950 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed (Item 5 from file: 155) DIALOG(R) File 155:MEDLINE(R) (c) format only 2004 The Dialog Corp. All rts. reserv. 11772948 PMID: 11956294 Ligand binding sites of inducible costimulator and high avidity mutants with improved function. Wang Shengdian; Zhu Gefeng; Tamada Koji; Chen Lieping; Bajorath Jurgen Department of Immunology, Mayo Clinic, Rochester, MN 55905, USA. Apr 15 2002, 195 (8) Journal of experimental medicine (United States) p1033-41, ISSN 0022-1007 Journal Code: 2985109R Contract/Grant No.: CA79915; CA; NCI; CA85712; CA; NCI Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed (Item 6 from file: 155) DIALOG(R) File 155:MEDLINE(R) (c) format only 2004 The Dialog Corp. All rts. reserv. PMID: 11861596 11687543 The B7 family of ligands and its receptors: new pathways for costimulation and inhibition of immune responses. Carreno Beatriz M; Collins Mary Genetics Institute/Wyeth Research, 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, USA. bcarreno@genetics.com Annual review of immunology (United States) 2002, 20 p29-53, ISSN

Document type: Journal Article; Review; Review, Tutorial Languages: ENGLISH Main Citation Owner: NLM Record type: Completed (Item 1 from file: 399) 8/3/52 DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. JOURNAL CA: 140(11)161941g Control of autoimmune diseases by the B7-CD28 family molecules AUTHOR(S): Anand, Sudarshan; Chen, Lieping LOCATION: Department of Immunology, Mayo Clinic, Mayo Medical School and Graduate School, Rochester, MN, 55905, USA JOURNAL: Curr. Pharm. Des. (Current Pharmaceutical Design) DATE: 2004 VOLUME: 10 NUMBER: 2 PAGES: 121-128 CODEN: CPDEFP ISSN: 1381-6128 LANGUAGE: English PUBLISHER: Bentham Science Publishers Ltd. (Item 2 from file: 399) 8/3/53 DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 140(4)40900j PATENT Immunomodulation in a mammal by the alteration of specific gene expression in dendritic cells using small interfering RNA, and therapeutic uses INVENTOR (AUTHOR): Min, Wei-ping; Ichim, Thomas; Hill, Jonathan LOCATION: Can., ASSIGNEE: London Health Sciences Centre Research Inc. PATENT: PCT International; WO 2003104456 Al DATE: 20031218 APPLICATION: WO 2003CA867 (20030610) \*CA 2388441 (20020610) PAGES: 52 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/11A; C12N-005/10B; A61K-039/00B; A61P-037/00B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM ; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG (Item 3 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 140(4)40883f Epstein-Barr virus-specific immunization INVENTOR(AUTHOR): Celis, Esteban LOCATION: USA ASSIGNEE: Mayo Foundation for Medical Education and Research PATENT: PCT International ; WO 2003105665 A2 DATE: 20031224 APPLICATION: WO 2003US18682 (20030613) \*US PV388625 (20020614) PAGES: 56 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61B-000/A DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV: MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE; SG: SK; SL; TJ; TM; TN; TT; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZM; ZW; AM;

0732-0582

Journal Code: 8309206

AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG (Item 4 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 140(3)26615p JOURNAL Informatics and the immune system: the expanding IL-1 and B7 protein AUTHOR(S): Grant, Ethan P.; Coyle, Anthony J.; Gutierrez-Ramos, Jose-Carlos LOCATION: Millennium Pharmaceuticals, Inc., Cambridge, MA, 02139, USA JOURNAL: Semin. Immunol. (Seminars in Immunology) DATE: 2003 VOLUME: 15 NUMBER: 4 PAGES: 225-231 CODEN: SEIME2 ISSN: 1044-5323 LANGUAGE: English PUBLISHER: Elsevier Science B.V. 8/3/56 (Item 5 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 139(13)192528m PATENT Sequences of the modified human protein ICOS having altered affinity for INVENTOR(AUTHOR): Chen, Lieping; Bajorath, Jurgen LOCATION: USA PATENT: U.S. Pat. Appl. Publ.; US 20030158102 A1 DATE: 20030821 APPLICATION: US 72622 (20020207) PAGES: 27 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000; A61K-038/17A; C07K-014/47B; C12P-021/02B; C12N-005/06B; C07H-021/04B (Item 6 from file: 399) 8/3/57 DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. PATENT CA: 139(7)99862f 139099862 Activation and expansion of T-cells using an engineered multivalent signaling platform INVENTOR (AUTHOR): Maus, Marcela; Thomas, Anna; June, Carl; Riley, James LOCATION: USA ASSIGNEE: The Trustees of the University of Pennsylvania PATENT: PCT International; WO 200357171 A2 DATE: 20030717 APPLICATION: WO 2003US339 (20030103) \*US PV346092 (20020103) PAGES: 108 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-000/A DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS ; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG (Item 7 from file: 399) 8/3/58 DIALOG(R) File 399:CA SEARCH(R)

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CA: 138(25)384162p PATENT Antibodies and small molecules that modulate immune cell activation through blockage of PD-1 ligands and B7 molecules INVENTOR (AUTHOR): Freeman, Gordon J.; Sharpe, Arlene H.; Buhlman, Janet; Mandelbrot, Didier LOCATION: USA ASSIGNEE: Dana-Farber Cancer Institute, Inc.; Brigham and Women's Hospital PATENT: PCT International; WO 200342402 A2 DATE: 20030522 APPLICATION: WO 2002US36518 (20021112) \*US PV337817 (20011113) PAGES: 72 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-000/A DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TN; TT; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW ; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG 8/3/59 (Item 8 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 138(12)168815m PATENT 138168815 B7-related nucleic acids and polypeptides useful for immunomodulation INVENTOR (AUTHOR): Mikesell, Glen E.; Shen, Henry LOCATION: USA PATENT: U.S. Pat. Appl. Publ.; US 20030031675 A1 DATE: 20030213 APPLICATION: US 77023 (20020215) \*US PV209811 (20000606) \*US PV272107 (20010228) \*US 875338 (20010606) PAGES: 163 pp., Cont.-in-part of U.S. Ser. No. 875,338. CODEN: USXXCO LANGUAGE: English CLASS: 424178100; A61K-039/395A; C07H-021/04B; C12P-021/04B; C12N-001/21B; C12N-005/04B; C12N-005/06B 8/3/60 (Item 9 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 137(21)305774t PATENT 137305774 Human cDNA sequences and their encoded proteins and diagnostic and therapeutic uses INVENTOR (AUTHOR): Anderson, David; Burgess, Catherine E.; Casman, Stacie J.; Colman, Steven; Edinger, Schlomit; Ellerman, Karen; Gerlach, Valerie; Gunther, Erik; Kekuda, Ramesh; MacDougall, John R.; Mehraban, Fuad; Patturajan, Meera; Rothenberg, Mark; Shimkets, Richard A.; Smithson, Glennda; Spytek, Kimberly A.; Stone, David J.; Vernet, Corine A. M.; Zerhusen, Bryan D. LOCATION: USA ASSIGNEE: Curagen Corporation PATENT: PCT International; WO 200281510 A2 DATE: 20021017 APPLICATION: WO 2002US1467 (20020118) \*US PV262454 (20010118) \*US PV262892 (20010119) \*US PV263605 (20010123) \*US PV264159 (20010125) \*US PV265517 (20010131) \*US PV267057 (20010207) \*US PV269098 (20010215) \*US PV271855 (20010227) \*US PV272920 (20010302) \*US PV284549 (20010418) \*US PV285040 (20010420) \*US PV286287 (20010424) \*US PV303229 (20010705) PAGES: 415 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/00A DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;

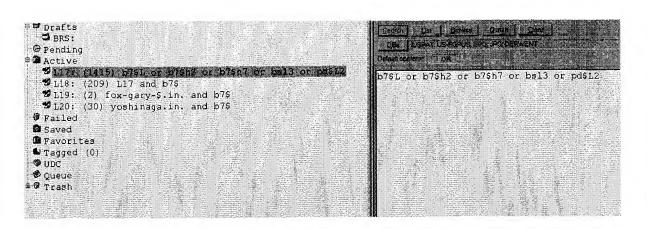
SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD ; SL; SZ; TZ; UG; ZM; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG (Item 10 from file: 399) 8/3/61 DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 137(11)153820g PATENT Protein and cDNA sequences of novel members of human B7 family, B7-H2 molecules, and uses thereof INVENTOR (AUTHOR): Coyle, Anthony J.; Fraser, Christopher C.; Manning, Stephen LOCATION: USA ASSIGNEE: Millennium Pharmaceuticals, Inc. PATENT: U.S. Pat. Appl. Publ.; US 20020106730 A1 DATE: 20020808 APPLICATION: US 910174 (20010720) \*US 620461 (20000720) PAGES: 101 pp., Cont.-in-part of U.S. Ser. No. 620,461. CODEN: USXXCO LANGUAGE: English CLASS: 435069100; C07K-014/705A; C07H-021/04B; C12P-021/02B; C12N-005/06B 8/3/62 (Item 11 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 137(8)108297p PATENT B7-related factors BSL1, BSL2 and BSL3, encoding nucleic acids and antibodies for immunomodulation and treatment of cancer, viral infection, autoimmune disease, transplant rejection and graft verse host disease INVENTOR (AUTHOR): Mikesell, Glen E.; Chang, Han; Finger, Joshua N.; Yang, Guchen; Lu, Pin; Zhou, Xia-Di; Peach, Robert J. LOCATION: USA PATENT: U.S. Pat. Appl. Publ.; US 20020095024 A1 DATE: 20020718 APPLICATION: US 875338 (20010606) \*US PV209811 (20000606) \*US PV272107 (20010228)PAGES: 82 pp., Cont.-in-part of U.S. Provisional Ser. No. 272,107. CODEN: USXXCO LANGUAGE: English CLASS: 530350000; C07K-014/705A; C07K-016/28B; C12P-021/02B; C07H-021/04B; C12N-005/06B (Item 12 from file: 399) 8/3/63 DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. PATENT CA: 137(6)77882u 137077882 Human antiqen B7-H2 and cDNAs and drug screening targeted to its regulation and other therapeutic application for related diseases INVENTOR (AUTHOR): Encinas, Jeffrey; Tanabe, Eri; Watanabe, Shinichi LOCATION: Germany, ASSIGNEE: Bayer Aktiengesellschaft PATENT: PCT International; WO 200253733 A2 DATE: 20020711 APPLICATION: WO 2002EP28 (20020104) \*US PV259632 (20010104) PAGES: 105 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/12A; C07K-014/47B; G01N-033/68B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PH;

PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; CH; CY; DE; DK;

ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG 8/3/64 (Item 13 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 136(10)149860q B7-H3 and B7-H4, novel immunoregulatory molecules INVENTOR (AUTHOR): Chen, Lieping LOCATION: USA ASSIGNEE: Mayo Foundation for Medical Education and Research PATENT: PCT International; WO 200210187 A1 DATE: 20020207 APPLICATION: WO 2001US41430 (20010726) \*US PV220991 (20000727) PAGES: 61 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12N-015/00B; C12N-015/12B; C12N-015/63B; C07K-016/46B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG 8/3/65 (Item 14 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. CA: 136(10)146182i PATENT Protein and cDNA sequences of novel human and mouse protein B7-H2 sequence homologs and uses thereof INVENTOR (AUTHOR): Coyle, Anthony J.; Fraser, Christopher C.; Manning, Stephen LOCATION: USA ASSIGNEE: Millennium Pharmaceuticals, Inc. PATENT: PCT International; WO 200208279 A2 DATE: 20020131 APPLICATION: WO 2001US23094 (20010720) \*US 620461 (20000720) PAGES: 169 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/47A DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; CZ; DE; DE; DK; DK; DM; DZ; EC; EE; EE; ES; FI; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS ; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG 8/3/66 (Item 15 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2004 American Chemical Society. All rts. reserv. 134218032 CA: 134(16)218032u PATENT Cloning and characterization of a B7 homolog 3 (B7-H3) protein and its therapeutic application INVENTOR (AUTHOR): Ruben, Steven M.; Chen, Lieping; Baker, Kevin; Ni, Jian LOCATION: USA ASSIGNEE: Human Genome Sciences, Inc.; Mayo Clinic PATENT: PCT International; WO 200118021 A1 DATE: 20010315 APPLICATION: WO 2000US23792 (20000830) \*US PV152317 (19990903) \*US

PV200346 (20000428)

PAGES: 252 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12N-001/21B; C12N-015/00B; C12N-015/63B; C07K-014/46B; C07K-014/52B; A61K-038/00B; C12Q-001/68B; G01N-033/53B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG



09/955866

(W) H7 OR BSL3 OR PD-

Set	ltems	Description
S1	30	E3-E6
S2	29	RD S1 (unique items)
S3	28	E1-E5
S4	0	(S1 OR S3) AND (B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD-
	( W	() L2)
S5	17	(S1 OR S3) AND B7?
S6	12	RD S5 (unique items)
S7	112	(B7(W)L OR B7(W)H2 OR B7(W)H7 OR BSL3 OR PD(W)L2) AND B7?
S8	66	RD S7 (unique items)
S9	15	S8 AND PY<2002
2		